

Name Key

Date _____

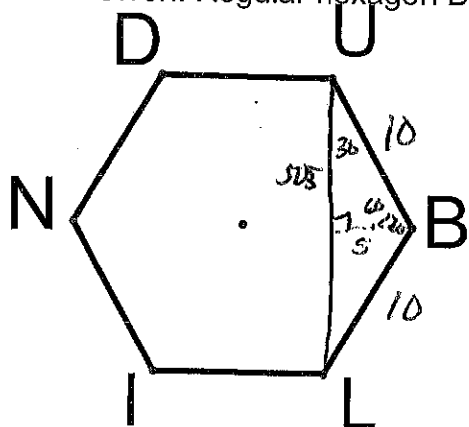
Complete the charts using the special right triangle patterns.

	30°	60°	90°
1.	x	$x\sqrt{3}$	$2x$
2.	4	$4\sqrt{3}$	8
3.	7	$7\sqrt{3}$	14
4.	8	$8\sqrt{3}$	16
5.	$\sqrt{5}$	$\sqrt{15}$	$2\sqrt{5}$
6.	$\sqrt{10}$	$\sqrt{30}$	$2\sqrt{10}$

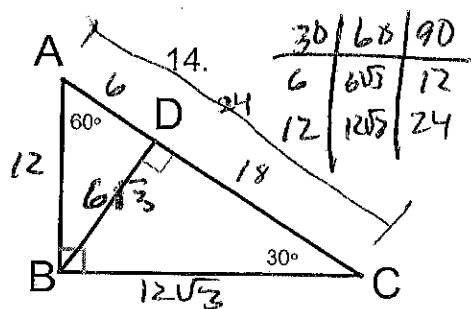
	45°	45°	90°
7.	x	x	$x\sqrt{2}$
8.	3	3	$3\sqrt{2}$
9.	5	5	$5\sqrt{2}$
10.	12	12	$12\sqrt{2}$
11.	$3\sqrt{3}$	$3\sqrt{3}$	$3\sqrt{6}$
12.	$\sqrt{6}$	$\sqrt{6}$	$\sqrt{12}$ $2\sqrt{3}$

13. Given: Regular hexagon DUBLIN

UB = 10. Find UL.

HINT: Draw UL, $m\angle B = 120^\circ$, what kind of triangle is $\triangle UBL$?

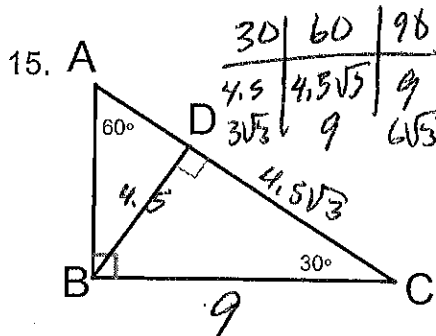
$$UL = 10\sqrt{3}$$



14.
BD = $6\sqrt{3}$

AB = 12

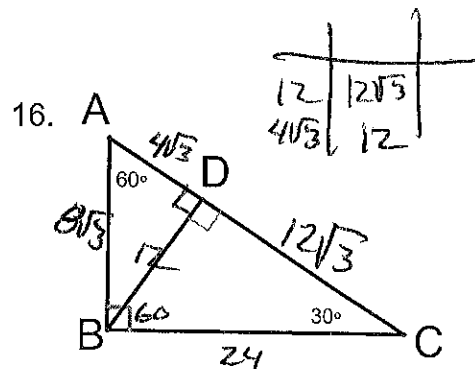
BC = $12\sqrt{3}$



15.
BC = 9

DB = 4.5

AC = $6\sqrt{3}$



16.
CD = $12\sqrt{3}$

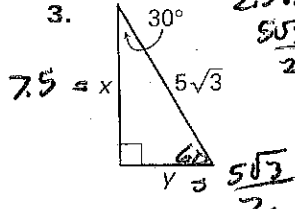
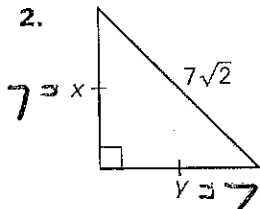
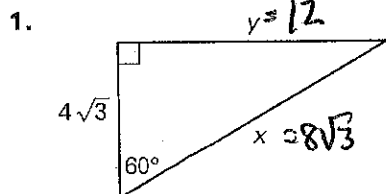
AB = $8\sqrt{3}$

LESSON
7.4

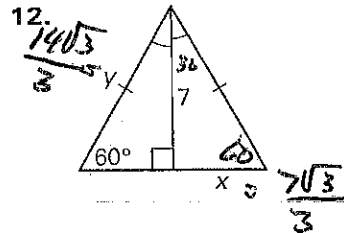
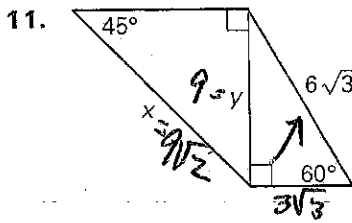
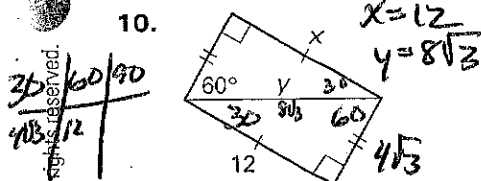
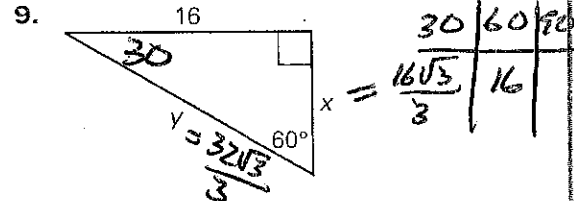
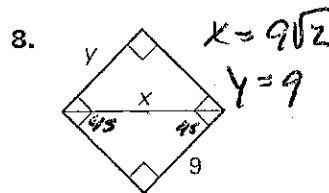
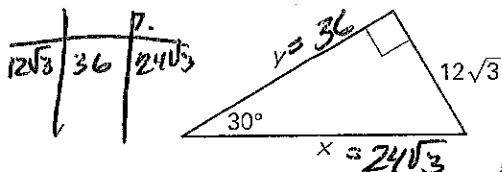
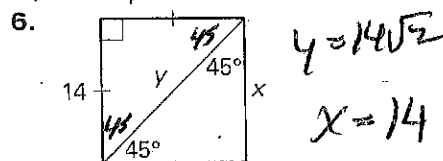
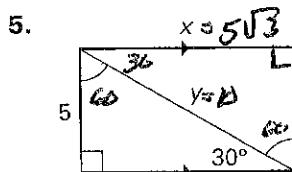
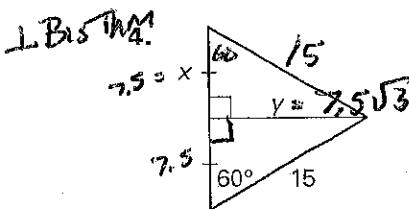
Practice C

For use with pages 457-464

Find the value of each variable. Write your answers in simplest radical form.



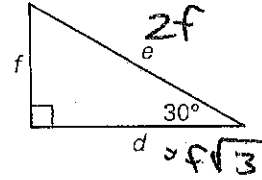
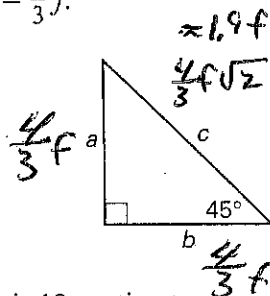
$$\begin{array}{r|rr} 30 & 60 & 90 \\ \hline 2.5\sqrt{3} & 15 & 5\sqrt{3} \\ \hline \end{array}$$



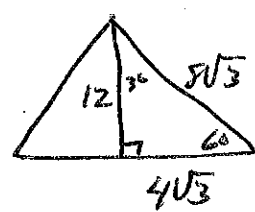
13. Multiple Choice In the diagrams to the right, $a = \frac{4}{3}f$.

Which side length is the longest?

- A. b
B. c
C. d
D. f



14. Perimeter The altitude of an equilateral triangle is 12 centimeters. Find the perimeter of the triangle. Round to the nearest tenth.



$$3 \times 8\sqrt{3}$$

$$P = 24\sqrt{3} \text{ cm}$$

$$\approx 41.6 \text{ cm}$$